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ABSTRACT

The study evaluated the emotional stability of 465 children (grades 2 through 12) in special education programs for the gifted compared to that of 329 children attending regular classroom programs. Two anxiety scales were used in the study: the Revised Children's Manifest Anxiety Scale and the Trait Scale of the State-Trait Anxiety Inventory for Children. The gifted sample consistently displayed lower levels of anxiety than their nongifted peers. It is concluded that, if heightened anxiety levels are indicators of emotional difficulties, the gifted sample demonstrates a higher level of general emotional mental health than their nongifted peers. A table with statistical data is included. (Author/SB)

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Emotional Stability of Gifted Children As Estimated by Chronic Anxiety Levels

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Abstract

Despite current interests in the education of intellectually superior students, there remains a paucity of research on the affective characteristics of these children relative to other categories of exceptionality. The present study evaluated the emotional stability of a large group of children (N = 465) with IQ's above 129 relative to a random sample (N = 329) of children attending only regular classroom programs. On multiple measures of chronic, manifest anxiety, the intellectually gifted sample consistently displayed lower levels of anxiety than their nongifted peers, indicating better overall adjustment. These findings should help lay to rest the seemingly robust mythology of the emotionally unstable genius.

Despite a resurgence of interest in education of intellectually gifted children, there remains a paucity of research regarding these children, relative to other categories of exceptionality. This is especially true with regard to the affective domain as the apparent mythology of the "emotionally unstable genius" unfortunately remains afloat. Lay characterizations of very high IQ children frequently refer to oversensitivity, symptoms associated with schizophrenia, and the "thin gray line between genius and crazy." It has been the author's (CRR) experience in private practice that parents of high IQ children are frequently concerned that their children will become social outcasts and develop severe emotional adjustment problems. On a recent, popular CBS television news show, a teacher of gifted children remarked that these children are often social isolates, singled out from their peers, and more prone to emotional problems.

A number of studies indicates that emotional disturbance is negatively correlated with functional intelligence, scholastic attainment, and artistic achievement, yet few of these studies have directly examined gifted children. Nor have they been able to lay to rest the stereotype of the "crazy but genius artist" or "the brilliant but mad scientist" running rampant in the laboratory. Recent research is particularly meager with regard to the affective characteristics of high IQ children. Gallagher (1975), in reviewing the literature on personality characteristics of gifted children, refers to no studies later

than 1959.

The available research does tend to refute the stereotype of high IQ children as having more personality or emotional problems. Gair (1944) and later Jacobs (1971), studying the Rorschach responses of groups of high IQ children, report that these children shown generally better emotional adjustment and greater maturity of personality than comparably aged children of average intellectual prowess. Reporting on judges' global ratings of the Rorschach responses of a group of high IQ children, Gallagher and Crowder (1957) found very little evidence of emotional disturbance but rather good ego control among these children. Teacher ratings of personality and behavior were equally favorable in this study. Incidence of behavior problems was also relatively low in the Gallagher and Crowder (1957) study. Bosse (1979), Hildreth (1938), Lightfoot (1951), Mensh (1950), Cussman and Justman (1975), and Ramaseshan (1957) all report better adjustment and fewer emotional problems among samples of gifted children.

The results of these studies are in concordance with the longitudinal research of Terman and his colleagues (Oden, 1968; Terman & Oden, 1940, 1947, 1951; Terman, 1954). The "Terman Study" as this work has come to be called, studied the characteristics of a large group of high IQ children for well over 40 years. Among the many other positive findings of the Terman Study, these individuals have consistently been found to exhibit greater emotional stability than expected in a random sample of the population. The Terman Study

does have its methodological difficulties however, as do the other studies reviewed above and it is necessary to continue to evaluate and report on the emotional stability of high IQ children in our society. However, two other factors also prompt the present research.

As stated earlier, the stereotype of the emotionally unstable genius persists. This is largely due to the rugged persistence of early beliefs and observations stemming from anecdotal and single case studies. The high IQ child and especially the very high IQ child who has undue emotional difficulties attracts a considerable amount of attention, William James Sidis (Montour, 1977) being an excellent case in point. The old folklore dies hard. Prentky (1980) opens his well done work on the relationship between creativity and psychopathology with a quote attributed to Schopenhauer: "Genius is closer to madness than to ordinary intelligence . . . like lunatics, they are in a state of continual agitation" (Prentky, 1980, p. 1). This view was certainly widely held in the 1800s (Prentky, 1980). Only sustained efforts of empirical evaluation can even now dissuade those who continue to harbor this belief.

The second factor prompting this research is one not many social scientists are wont to mention. Research results in the social sciences may not be impervious to time, particularly as they involve people's attitudes and behaviors and the impact of those attitudes and behaviors on others. What may have been true about the emotional stability of gifted children two or more decades ago, may not at all be the case today. Thus it was the primary purpose of this study

to evaluate the emotional stability of a large group of high IQ children relative to a random sample of age peers attending regular classroom programs. Since much of the prior work in this area has used projective testing and teacher ratings that are easily subject to biased interpretations or subjective influences, it was further decided to employ objective personality tests to help overcome any biased impressions that may have been operating in prior research or that may have influenced our own work.

Method

Subjects

The intellectually gifted group consisted of 465 children (207 males, 258 females) attending special educational programs for gifted children in a public school setting. The children represented nearly 50 school districts and their specific special programs varied substantially from in class enrichment activities to resource room placements of an hour per day with teachers specially trained and certified to work with gifted children. Criteria for placement in these programs varied but all programs required a Binet or Wechsler IQ above 129. While this was the sole criterion in some cases, other schools required equally high levels of academic achievement along with teacher nomination. These gifted children ranged in grade placement from 2 to 12 and had a mean age of 11.6 years, standard deviation = 2.25 years. The normal control group consisted of 329 children (156 males and 173 females) attending randomly selected public school regular classroom programs. Grade placement of this

group ranged from 1 to 12 with a mean age of 11.2 years, standard deviation = 2.21 years. The investigators were not allowed to collect data regarding socioeconomic status (SES) of the children in either sample, and it is not known to what extent any unknown SES differences might bias the outcome of the research. Previous research has only shown sex to be consistently related to performance on the tests employed in the study (Reynolds & Richmond, 1978) with age showing occasional effects. The two groups are highly comparable with regard to both of these variables, and any differences detected can not be attributed to differential age or sex distributions in the two groups.

Test Instruments

Two anxiety scales were used in the study, the Revised-Children's Manifest Anxiety Scale (RCMAS) (Reynolds & Richmond, 1978) and the Trait Scale of the State-Trait Anxiety Inventory for Children (STAIC) (Spielberger, 1973). Both instruments are general trait measures of chronic anxiety. It was decided to use these scales since anxiety, particularly chronic manifest anxiety is implicated in some way in virtually all neurotic and personality disorders, interferes with the performance of complex tasks, and since increases in anxiety levels can be a precursor to the onset of emotional breakdowns.

Both of the scales utilized have internal reliability estimates reported to be in the .80s (Reynolds & Richmond, 1978; Spielberger, 1973) and should thus be able to detect differences in anxiety levels across groups. In addition to the general anxiety factor (A_g), the

RCMAS yields scores for three subscales of anxiety (Physiological Anxiety, Worry/Oversensitivity, and Concentration Anxiety) and a social desirability or Lie Scale (Reynolds & Paget, 1981; Reynolds & Richmond, 1979). The STAIC Trait Scale yields a single score reflecting a child's level of anxiety as a relatively static trait. Validity data are available on these scales in a variety of sources (e.g., Reynolds, 1980; Reynolds & Paget, 1981; Spielberger, 1973).

Procedure

All children were administered the tests by their teachers using standard instructions provided on each scale. Regular classroom teachers administered the scale to the control group while administration of tests to the intellectually gifted sample varied; in the case of children attending special classes for the gifted, the special teacher assigned to this class administered the tests, otherwise, the regular class teacher also tested the gifted sample.

Once all testing was completed, means and standard deviations were calculated for each sample on all variables. Mean levels of performance were then compared across groups via a series of *t*-tests with a Bonferroni type adjustment to control for Type I error rates.

Results and Discussion

The basic results of the study are presented in Table 1. As is readily apparent, the intellectually gifted sample earned lower

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Insert Table 1 About Here

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scores in every instance, indicating lower anxiety levels than their

nongifted peers. The differences in means were statistically quite significant ($p < .001$) in each instance, even after correction for the number of comparisons being made (6). The size of the t value in each case is considerable, obviating the need for any more sophisticated statistical analyses. The gifted sample also showed a lesser tendency to respond with the more socially desirable response when confronted with the Lie Scale items of the RCMAS.(This scale contains such items as "I like everyone I know" and "I am always kind to everyone.") While the latter finding may indicate less of a need for conformity among high IQ children, it could also simply be that these children see through the intent of the items more readily.

If heightened anxiety levels are indeed indicators of emotional difficulties, as much research would tell us, then the sample of intellectually gifted children studied here demonstrates a higher level of general emotional mental health than their nongifted peers. These children are also likely at lesser risk for later developing emotional problems. The results reported here are very consistent with the research of Terman (e.g., Terman & Oden, 1951) and others reviewed earlier. Our results add to this earlier body of literature with further evidence based on large samples and totally objective testing procedures and should add significantly to conclusions of superior mental health among high IQ groups. This is not to say that intellectually gifted children will not experience emotional difficulties and all the other minor emotional upsets of growing up. This body of literature does indicate that high IQ children as a group

experience emotional problems less frequently than their nongifted peers and that existing problems appear to be less severe. Present and related research should help dispel many of the myths of the gifted child and hasten understanding of these children as individuals, not as autotypes of the mad genius. Future research should address the direct frequency of specific behavior problems among high IQ children and the dimensions of those behavior problems.

It is important to note however that all of the gifted children in this study were involved in school-based special programs for high IQ children and were progressing academically in at least a satisfactory fashion. High IQ children not having such programs available to them may not have fared so well and our results cannot be generalized to encompass such children. Students with very high IQs also can earn other labels in the schools if exhibiting inappropriate behaviors and be placed in classes for the learning disabled or seriously emotionally disturbed. Such children might show considerable emotional maladjustment on the tests used in this study. However, such factors do not negate the principal results of the study; high IQ children attending school-based programs for the gifted experience significantly less stress and anxiety than children in regular classroom programs only and can be projected to experience fewer emotional problems.

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Table 1

Comparisons of Anxiety Levels Between Children in

Gifted Programs and Children in Regular Public School Programs

Scale	Gifted (N=465)			Non-Gifted (N=329)	
	Mean	Standard Deviation	t[a,b]	Mean	Standard Deviation
Revised-Children's Manifest Anxiety Scale					
Total Score	9.14	5.93	26.2	13.64	5.80
Physiological Subscale	2.94	2.10	69.9	4.60	2.15
Worry/Oversensitivity Subscale	3.70	2.70	49.6	5.10	2.33
Concentration Subscale	2.50	2.20	56.0	3.86	2.16
Social Desirability (Lie) Scale	1.75	2.13	69.8	3.54	2.38
State-Trait Anxiety Inventory for Children					
A-Trait Scale	34.23	7.14	10.2	36.78	6.30

[a] d.f. = 792.

[b] All differences are significant at $p < .001$.